

SEQUENCE LISTING

<110> Bayer AG

5 <120> Methods for Identifying Fungicides

<130> Le A 36 055

10 <160> 2

<170> PatentIn version 3.1

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<212> DNA

<213> Ustilago maydis

20 <220>

<221> CDS

25 <222> (1)..(1017)

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35 cgc tgt ttc atc gct cgc agt gct gcc ctt gcg ccg ctt ctc ctt cac 96
Arg Cys Phe Ile Ala Arg Ser Ala Ala Leu Ala Pro Leu Leu Leu His
20 25 30

40 ccc caa cgt cta cgt ctc act tgc cct cgc tcc ttt tct tct caa caa 144
Pro Gln Arg Leu Arg Leu Thr Cys Pro Arg Ser Phe Ser Ser Gln Gln
35 40 45

45 tct ggc cca cgc aag atg gct tct tcc aac gct acc aac agt acc agt 192
Ser Gly Pro Arg Lys Met Ala Ser Ser Asn Ala Thr Asn Ser Thr Ser
50 55 60

gcc gcc agt gct gcc aac acc aac tcg tct gct ttc aag agt gcc gaa 240

| | | | | |
|----|---|-----|-----|-----|
| | Ala Ala Ser Ala Ala Asn Thr Asn Ser Ser Ala Phe Lys Ser Ala Glu | | | |
| 65 | 65 | 70 | 75 | 80 |
| 5 | ttg gct gct ttg agc ggc gtc gag gct gct aag cgt gct gct gcg tac | | | 288 |
| | Leu Ala Ala Leu Ser Gly Val Glu Ala Ala Lys Arg Ala Ala Ala Tyr | | | |
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| 10 | gct gcc gtt gac aac cac gtc aag ccg cag cac gag atc att ggt att | | | 336 |
| | Ala Ala Val Asp Asn His Val Lys Pro Gln His Glu Ile Ile Gly Ile | | | |
| | 100 | 105 | 110 | |
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| | Gly Ser Gly Ser Thr Val Pro Tyr Val Val Glu Arg Ile Ala Gln Gln | | | |
| | 115 | 120 | 125 | |
| | gga cct gct gtg aat gca aag cgt tgg ttc gtt ccc acc ggc ttc cag | | | 432 |
| | Gly Pro Ala Val Asn Ala Lys Arg Trp Phe Val Pro Thr Gly Phe Gln | | | |
| | 130 | 135 | 140 | |
| 20 | tca cgc gaa ctc atc atc aac gcc ggc ctt cgt ctc ggt gat gtg gat | | | 480 |
| | Ser Arg Glu Leu Ile Ile Asn Ala Gly Leu Arg Leu Gly Asp Val Asp | | | |
| | 145 | 150 | 155 | 160 |
| 25 | agc ttc ccc agc atc gac gtc act atc gat ggc gct gac gag gtc gac | | | 528 |
| | Ser Phe Pro Ser Ile Asp Val Thr Ile Asp Gly Ala Asp Glu Val Asp | | | |
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| | Asn Ala Leu Asn Cys Ile Lys Gly Gly Ala Cys His Leu Arg Glu | | | |
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| 35 | aag gta ctc gcc gaa gcc aat gaa ttt gtc gta gtc gct gac tac | | | 624 |
| | Lys Val Leu Ala Ala Asn Glu Phe Val Val Val Ala Asp Tyr | | | |
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| | cgc aag aat gga tcg cag ctc ggc aca aag tgg ctg caa ggt gtc ccc | | | 672 |
| | Arg Lys Asn Gly Ser Gln Leu Gly Thr Lys Trp Leu Gln Gly Val Pro | | | |
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| 40 | atc gag gtc gct ccg ttt gcc tat gca aaa gtg ctt cag aac ctc aaa | | | 720 |
| | Ile Glu Val Ala Pro Phe Ala Tyr Ala Lys Val Leu Gln Asn Leu Lys | | | |
| | 225 | 230 | 235 | 240 |
| 45 | aag atg ggt tct gac aag ggc gtc ctt cgc atg ggc aag gca aaa gcc | | | 768 |
| | Lys Met Gly Ser Asp Lys Ala Val Leu Arg Met Gly Lys Ala Lys Ala | | | |
| | 245 | 250 | 255 | |

ggt ccc gtc gtt aca gat aat ggc aac ttt tgc atc gat gct ccc ttc 816
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260 265 270

5
ccc gaa gca cag atg aag gat ccc tct gat ttg ctc aag cgt atc aag 864
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275 280 285

10 ttg ctc acc ggt gta ctt gag gtc ggt ctg ttt tgc aac att tgc aag 912
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290 295 300

15 tcc gcc tac ttt ggc aac gat gac ggc acc atc acc atc aaa acc gcc 960
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<213> Ustilago maydis

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Pro Gln Arg Leu Arg Leu Thr Cys Pro Arg Ser Phe Ser Ser Gln Gln
35 40 45

5 Ser Gly Pro Arg Lys Met Ala Ser Ser Asn Ala Thr Asn Ser Thr Ser
50 55 60

10 Ala Ala Ser Ala Ala Asn Thr Asn Ser Ser Ala Phe Lys Ser Ala Glu
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15 Leu Ala Ala Leu Ser Gly Val Glu Ala Ala Lys Arg Ala Ala Ala Tyr
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20 Ala Ala Val Asp Asn His Val Lys Pro Gln His Glu Ile Ile Gly Ile
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Gly Ser Gly Ser Thr Val Pro Tyr Val Val Glu Arg Ile Ala Gln Gln
115 120 125

25 Gly Pro Ala Val Asn Ala Lys Arg Trp Phe Val Pro Thr Gly Phe Gln
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30 Ser Arg Glu Leu Ile Ile Asn Ala Gly Leu Arg Leu Gly Asp Val Asp
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35 Ser Phe Pro Ser Ile Asp Val Thr Ile Asp Gly Ala Asp Glu Val Asp
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40 Asn Ala Leu Asn Cys Ile Lys Gly Gly Ala Cys His Leu Arg Glu
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Lys Val Leu Ala Glu Ala Ala Asn Glu Phe Val Val Val Ala Asp Tyr
195 200 205

45 Arg Lys Asn Gly Ser Gln Leu Gly Thr Lys Trp Leu Gln Gly Val Pro
210 215 220

Ile Glu Val Ala Pro Phe Ala Tyr Ala Lys Val Leu Gln Asn Leu Lys
225 230 235 240

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Lys Met Gly Ser Asp Lys Ala Val Leu Arg Met Gly Lys Ala Lys Ala
245 250 255

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Gly Pro Val Val Thr Asp Asn Gly Asn Phe Cys Ile Asp Ala Pro Phe
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Pro Glu Ala Gln Met Lys Asp Pro Ser Asp Leu Leu Lys Arg Ile Lys
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Leu Leu Thr Gly Val Leu Glu Val Gly Leu Phe Cys Asn Ile Cys Lys
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Ser Ala Tyr Phe Gly Asn Asp Asp Gly Thr Ile Thr Ile Lys Thr Ala
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325 330 335

30

Ala Thr Ala